Complete Summary

TITLE

Ischemic heart disease: percent of patients hospitalized with acute coronary syndrome (ACS) found to be high ST-segment elevation myocardial infarction (STEMI) or moderate-high risk non-ST-segment elevation myocardial infarction (NSTEMI) patients who receive a diagnostic catheterization prior to discharge (inpatient AMI all cohort [inclusive of JCAHO AMI]).

SOURCE(S)

Office of Quality and Performance (10Q). FY 2005 VHA executive career field network director performance measurement system and JCAHO hospital core measures. Technical manual. Washington (DC): Veterans Health Administration (VHA); 2005 Mar 9. 244 p.

Brief Abstract

DESCRIPTION

This measure assesses the percent of patients hospitalized with acute coronary syndrome (ACS) found to be high ST-segment elevation myocardial infarction (STEMI) or moderate-high risk non-ST-segment elevation myocardial infarction (NSTEMI) patients who receive a diagnostic catheterization prior to discharge.

RATIONALE

Since risk is an important driver of clinical management decisions, accurate yet simple methods of risk assessment are important for patient care. The goal of risk stratification is to identify patients whose outcomes can be improved through specific clinical interventions at different points of care, thus affecting both relative and absolute risk reduction in terminal endpoints.

While risk stratification must begin with the initial history and physical exam, electrocardiogram (ECG), and biochemical marker testing at acute presentation, physicians should continually reappraise risk throughout hospitalization to optimize both patient short-term and long-term outcomes. At subsequent points during hospitalization and after discharge, risk confirmation through non-invasive methods including exercise stress testing, exercise electrocardiography, myocardial perfusion imaging, exercise ventricular function imaging, and pharmacological stress testing and invasive procedures adds incremental information and prognostic value to the results of initial clinical evaluations. This

additional information also allows for the segmentation of patients into high, moderate, and low risk groups for prioritization of invasive procedures and stress testing both prior to and after discharge, thereby matching scarce cardiology resources commensurate with patient risk.

PRIMARY CLINICAL COMPONENT

Ischemic heart disease; acute coronary syndrome (ACS); ST-segment elevation myocardial infarction (STEMI); non-ST-segment elevation myocardial infarction (NSTEMI); diagnostic catheterization

DENOMINATOR DESCRIPTION

Patients from the Inpatient AMI All cohort (inclusive of JCAHO AMI) hospitalized with acute coronary syndrome (ACS) found to be high or moderate-high risk patients (includes patients already inpatients when acute myocardial infarction [AMI] occurred) (see the related "Denominator Inclusions/Exclusions" field in the Complete Summary)

NUMERATOR DESCRIPTION

The number of patients from the denominator who receive a diagnostic catheterization prior to discharge (see the related "Numerator Inclusions/Exclusions" field in the Complete Summary)

Evidence Supporting the Measure

PRIMARY MEASURE DOMAIN

Process

SECONDARY MEASURE DOMAIN

Not applicable

EVIDENCE SUPPORTING THE MEASURE

A clinical practice guideline or other peer-reviewed synthesis of the clinical evidence
One or more research studies published in a National Library of Medicine (NLM) indexed, peer-reviewed journal

NATIONAL GUIDELINE CLEARINGHOUSE LINK

- VA/DoD clinical practice guideline for management of ischemic heart disease.

Evidence Supporting Need for the Measure

NEED FOR THE MEASURE

Unspecified

State of Use of the Measure

STATE OF USE

Current routine use

CURRENT USE

External oversight/Veterans Health Administration
Internal quality improvement

Application of Measure in its Current Use

CARE SETTING

Hospitals

PROFESSIONALS RESPONSIBLE FOR HEALTH CARE

Physicians

LOWEST LEVEL OF HEALTH CARE DELIVERY ADDRESSED

Single Health Care Delivery Organizations

TARGET POPULATION AGE

Unspecified

TARGET POPULATION GENDER

Either male or female

STRATIFICATION BY VULNERABLE POPULATIONS

Unspecified

Characteristics of the Primary Clinical Component

INCIDENCE/PREVALENCE

Acute coronary syndrome (ACS) is the leading cause of morbidity and mortality among both men and women in the United States, affecting more than 13.9 million people. The acute presentation of ACS is varied, with acute myocardial infarction (AMI) being the most dramatic of presentations. Annually, AMI affects approximately 1.1 million people in the United States. The mortality rate with AMI

is approximately 30%. About once every 29 seconds, an American suffers a coronary event, and about every minute, someone dies from one.

EVIDENCE FOR INCIDENCE/PREVALENCE

Office of Quality and Performance (10Q). FY 2005 VHA executive career field network director performance measurement system and JCAHO hospital core measures. Technical manual. Washington (DC): Veterans Health Administration (VHA); 2005 Mar 9. 244 p.

ASSOCIATION WITH VULNERABLE POPULATIONS

Unspecified

BURDEN OF ILLNESS

See "Incidence/Prevalence" field.

UTILIZATION

Unspecified

COSTS

Unspecified

Institute of Medicine National Healthcare Quality Report Categories

IOM CARE NEED

Getting Better

IOM DOMAIN

Effectiveness

Data Collection for the Measure

CASE FINDING

Users of care only

DESCRIPTION OF CASE FINDING

Patients from the Inpatient Acute Myocardial Infarction (AMI) All cohort (inclusive of JCAHO AMI)*

*Refer to the original measure documentation for patient cohort descriptions.

DENOMINATOR SAMPLING FRAME

Patients associated with provider

DENOMINATOR (INDEX) EVENT

Clinical Condition
Institutionalization

DENOMINATOR INCLUSIONS/EXCLUSIONS

Inclusions

Patients from the Inpatient AMI All cohort (inclusive of JCAHO AMI) hospitalized with acute coronary syndrome (ACS) found to be high or moderate-high risk patients (includes patients already inpatients when acute myocardial infarction [AMI] occurred)*

*Level of Risk: In this measure, the objective findings of the electrocardiogram (ECG) and cardiac markers are used to establish ischemic burden and level of risk. Refer to "Table 12a-2: ACS Establishing Initial Risk Burden," in the original measure documentation for details.

Refer to the original measure documentation for patient cohort descriptions.

Exclusions

Unspecified

NUMERATOR INCLUSIONS/EXCLUSIONS

Inclusions

The number of patients from the denominator who receive a diagnostic catheterization prior to discharge*

*Diagnostic Catheterization: Invasive procedure in which a thin plastic tube (catheter) is inserted into an artery or vein in the arm or leg and advanced into the chambers of the heart or the coronary arteries. The test can measure blood pressure within the heart, how much oxygen is in the blood, and the pumping ability of the heart muscle. When dye is injected into the coronary arteries, the procedure is called coronary angiography or coronary arteriography. The procedure produces special pictures that can reveal if one or more of the coronary arteries are blocked or if the left ventricle is functioning properly.

- Cardiac catheterization without treatment of coronary artery blockages is diagnostic.
- If patient was sent out for a catheterization and returned in 12 hours, it is considered the same as being done at this Veterans Affairs Medical Center (VAMC).
- Does not refer to the cardiac catheterization done in conjunction with a percutaneous transluminal coronary angioplasty (PTCA)/percutaneous coronary intervention (PCI) shortly after admission for purposes of acute reperfusion.

Exclusions

Documentation:

- By cardiology that stress test is more reasonable first approach for this patient or
- By cardiology of known coronary artery lesion(s) not amenable to revascularization

- By cardiologist that patient is not a candidate for further work-up
- Of direct patient refusal of cardiac catheterization or decision not to treat

DENOMINATOR TIME WINDOW

Time window is a single point in time

NUMERATOR TIME WINDOW

Institutionalization

DATA SOURCE

Administrative and medical records data

LEVEL OF DETERMINATION OF QUALITY

Individual Case

PRE-EXISTING INSTRUMENT USED

Unspecified

Computation of the Measure

SCORING

Rate

INTERPRETATION OF SCORE

Better quality is associated with a higher score

ALLOWANCE FOR PATIENT FACTORS

Unspecified

STANDARD OF COMPARISON

Internal time comparison
Prescriptive standard

PRESCRIPTIVE STANDARD

Fiscal year (FY) 2005 targets for high/moderate risk patients who receive a diagnostic catheterization prior to discharge (Inpatient AMI All cohort [inclusive of JCAHO AMI]):

- Facility Floor: 70%

- Meets Target: 90%
- Exceeds Target: 95%

EVIDENCE FOR PRESCRIPTIVE STANDARD

Office of Quality and Performance (10Q). FY 2005 VHA executive career field network director performance measurement system and JCAHO hospital core measures. Technical manual. Washington (DC): Veterans Health Administration (VHA); 2005 Mar 9. 244 p.

Evaluation of Measure Properties

EXTENT OF MEASURE TESTING

Unspecified

Identifying Information

ORIGINAL TITLE

Ischemic heart disease (IHD): risk high/moderate with diagnostic catheterization prior to discharge.

MEASURE COLLECTION

Fiscal Year (FY) 2005: Veterans Health Administration (VHA) Performance Measurement System

MEASURE SET NAME

Cardiovascular

MEASURE SUBSET NAME

Ischemic Heart Disease

DEVELOPER

Veterans Health Administration

ADAPTATION

Measure was not adapted from another source.

RELEASE DATE

2003 Nov

REVISION DATE

2005 Mar

MEASURE STATUS

This is the current release of the measure.

SOURCE(S)

Office of Quality and Performance (10Q). FY 2005 VHA executive career field network director performance measurement system and JCAHO hospital core measures. Technical manual. Washington (DC): Veterans Health Administration (VHA); 2005 Mar 9. 244 p.

MEASURE AVAILABILITY

The individual measure, "Ischemic Heart Disease (IHD): Risk High/Moderate With Diagnostic Catheterization Prior to Discharge," is published in "FY 2005 VHA Performance Measurement System: Technical Manual."

For more information contact:

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NQMC STATUS

This NQMC summary was completed by ECRI on November 29, 2004. The information was verified by the measure developer on December 10, 2004.

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